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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,651	02/20/2002	Francesco A. Campisano	END920010057US1	8459
30743	7590	11/18/2004	EXAMINER	
WHITHAM, CURTIS & CHRISTOFFERSON, P.C. 11491 SUNSET HILLS ROAD SUITE 340 RESTON, VA 20190			CZEKAJ, DAVID J	
			ART UNIT	PAPER NUMBER
			2613	

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/079,651

Applicant(s)

CAMPISANO ET AL.

Examiner

Dave Czekaj

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 15, 7-12, and 14-15 is/are rejected.
- 7) ☒ Claim(s) 6 and 13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of: -
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2-20-02</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Specification

1. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sazzad et al. (6621867), (hereinafter referred to as "Sazzad").

Regarding claim 1, Sazzad discloses an apparatus that relates to the detection of edges in images (Sazzad: column 1, lines 11-13). This apparatus comprises "synchronizing a motion video decoder with a bottom border of a scaled image" (Sazzad: figures 1 and 5, column 6, lines 22-27, wherein the synchronizing is the process of only decoding the central images, not the top and bottom borders). Although Sazzad fails to disclose a frame switch point indicating the completion of decoding of a previous frame, Sazzad does disclose detecting vertical and horizontal edge information, indicating sharp changes between images (Sazzad: figure 5, column 6, lines 36-67). The examiner notes that sharp changes between images indicates a change or completion of frames

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of data. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the edge detection routine taught by Sazzad since edges are a good indication of a transition between images or frames.

4. Claims 2-5, 7-12, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sazzad et al. (6621867), (hereinafter referred to as "Sazzad") in view of Cheney et al. (5668599), (hereinafter referred to as "Cheney").

Regarding claims 2 and 9, note the examiners rejection for claim 1, and in addition, claims 2 and 9 differ from claim 1 in that claims 2 and 9 further require a spill buffer and controlling decoder latency according to the spill buffer. Cheney teaches that a spill buffer is needed to minimize memory requirements when decoding B frames (Cheney: column 14, lines 16-27). Cheney further discloses "altering decoder latency in response to the spill buffer" (Cheney: column 14, lines 36-44, wherein altering the latency is the process of holding back the decoding). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Sazzad and add the spill buffer taught by Cheney in order to obtain a more cost efficient apparatus by minimizing memory requirements.

Regarding claims 3 and 10, Cheney discloses "reconfiguring a frame buffer to accommodate an increased latency of motion video data scaled in the decoding path" (Cheney: column 14, lines 25-44, wherein reconfiguring the

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frame buffer is the process of detecting the frame buffer size and switching between the frame and spill buffers as needed).

Regarding claims 4-5 and 11-12, Cheney discloses "continuously scaling video from the motion video data by interpolation" (Cheney: figure 5, column 9, lines 66-67 – column 10, lines 1-5, wherein the interpolation is performed by the motion compensation unit).

Regarding claims 7-8 and 14-15, Cheney discloses "the spill buffer has a capacity equal to or less than one field" Cheney: figure 15, column 15, lines 1-31).

Allowable Subject Matter

5. Claims 6 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US-5583652	12-1996	Ware, Malcolm S.
US-6442206	08-2002	Hrusecky, David A.
US-6072548	06-2000	Schoner et al.
US-6459811	10-2002	Hurst, Robert N Jr.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Czekaj whose telephone number is (703) 305-3418. The examiner can normally be reached on Monday - Friday 9 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600